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(54) Title: IMPROVEMENTS IN OR RELATING TO HYPODERMIC SYRINGES

(57) **Abstract:** A hypodermic syringe comprises a housing (1), which includes a barrel portion (1.4) and an injectant chamber (1.5), where the injectant chamber has a smaller cross-sectional area than the barrel portion (1.4). A plunger (2), which comprises a piston (3), is slideably mounted within the barrel portion (1.4) and extends into the injectant chamber (1.5). A retractable needle assembly (5) is provided, together with stored energy means (4), so that, at the completion of an injection stroke, the piston (3) becomes attached to the needle assembly (5) and the stored energy is released to retract the needle assembly (5) into the housing (1). Co-operating features (3.7, 5.7) may be arranged on the piston (3) and needle assembly (5) so that complete evacuation of the injectant chamber (1.5) is not impeded. As the parameters of the stored energy means (4) are not limited by the physical dimensions of the injectant chamber (1.5), this arrangement is particularly suitable for small capacity syringes, i.e. 3 ml or less.



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